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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,030	05/18/2006	Roland Steffen	01012-1035	3912
30671 7590 03/24/2008 DITTHAVONG MORI & STEINER, P.C. 918 Prince St. Alexandria, VA 22314				
EXAMINER AKBAR, MUHAMMAD A				
ART UNIT 2618		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/563,030

**Applicant(s)**

STEFFEN ET AL.

**Examiner**

MUHAMMAD AKBAR

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/28/2008.

#### ***Response to Arguments***

2. Applicant's arguments with respect to claim(s) 1-20 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim(s) 1,2,5,6,7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiler et al (U.S. Patent No. 5,970,395) and in view of Randall et al (U.S. Patent No. 5,589,833).

Re claim 1, Weiler discloses a high-frequency interference signals measuring system (see abstract) for measuring a radiation frequency of portable computer (15 of fig.4) i.e. device under test, comprising:

a central monitoring unit (5 of fig.5) (i.e. measuring-device unit) and at least one high-frequency module (3A to 3N) (i.e. plurality of receiver unit) and each receiver unit (i.e. each high-frequency module) is placed separately from the central monitoring unit (5) (i.e. measuring-device unit) and each high-frequency receiver module comprises bus transmitting unit (19 of fig.5) which is connected to the monitoring unit (5) via digital data bus (4 of fig.5) (i.e. digital interface) for transmitting data from the central monitoring unit (5) to the receiver (3A...3N) (i.e. at least one of the high frequency module) (see abstract, fig. 4-5,col.3 lines 5-9 , col.3 lines 56-67 and col.4 lines10-32); and

processed or scanned input data (24 of fig.5) in the central monitoring unit (5) (i.e. measuring-device unit) and form a bit stream (digital form) for transmission via data bus (4)(see fig.4,5 and col. col.4 lines 53-67) to the high frequency module (3) for subsequent forwarding to the device under test (15 of fig.4) (see fig.4,5 and col.4 lines 53-67,col.5 lines 10-32,col.6 lines23-33).

But Weiler failed to disclose explicitly manually input into the measuring device unit and processing input data including symbol to state I-Q (inphase and quadrature phase) level in the measuring device unit.

However, Randall et al teaches radar data acquisition system (same field of endeavor) wherein acquisition system comprising computer system, digital intermediate frequency processor, DSP, antenna , separate transmitter/receiver module (115,120 of fig.2) and electronics circuit module (245 of fig.4) includes display and keyboard (i.e. measuring device) wherein electronics circuit module (245) further comprising digital IF

processor (304 of fig.3) for processing input IF signal and assigning symbol to state I-Q signal components ( see fig. 3,4 and col.5 lines 14-50);

Randall et al further teaches electronics circuit module (245) further comprising DSP(328) wherein user can customize/debug high speed signal processing tasks by inputting data via keyboard (i.e. user can input data manually to the measuring device) based on radar data installation demands (see fig.2,3,4,5( step 540),6 and col.5 lines 61-67,col.6 lines 38-54, col.11 lines 14-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the high frequency signal measurement system comprises device under test (computer), a central monitoring unit (i.e. measuring-device unit) and at least one high-frequency module which is separated from the central monitoring unit and connected to the monitoring unit via digital data bus (as taught by Weiler) by substituting measuring device with electronics circuit module (245) comprising digital IF processor (304 of fig.3) for processing input IF signal and assigning symbol to state I-Q signal components and DSP(328) wherein user can customize/debug high speed signal processing tasks by keyboard (as taught by Randall et al) for improving quality of signal by reducing noise through proper signal conversion as well as user can customize design data by tuning input data.

Re claim 2, as discussed above with respect to claim 1, Weiler further discloses the high-frequency receiver module (3 of fig. 5) comprises a bus transmitter unit (19 of

fig.5) i.e. transmitter device for communication with a portable computer (15 of fig.4) i.e. device under test via antenna (17 of fig. 5).

Re claim(s) 5 and 6, as discussed above with respect to claim 1, Weiler further discloses the high-frequency measuring system used digital interface is an optical interface and electrical interface (see col.2 lines 33-41).

Re claim 7, as discussed above with respect to claim 1, Weiler furthermore discloses the high-frequency measuring system comprises portable computer (15 of fig.4) i.e. device under test [frequency module] wherein supplying power independently from monitoring unit (5) through power cable (16 of fig.4) [Moreover, every receiver component essentially provided an electrical energy through power supply for it's operation].

Re claim 10, as discussed above with respect to claim 1, Weiler further discloses the high-frequency measuring system comprises receiver unit (3) wherein scanned, evaluated [i.e. received signal standardized in the frequency scanner to form a digital data for standardized transmitting through digital data interface] received signal from the antenna for checking the threshold value level by the frequency scanner (18 of fig.5) and provided data to the bus transmitting unit (19 of fig.5 ) via digital bus interface (4) to the monitoring unit (5) wherein a level matrix (21 of fig.5), an interference computer (22 of fig.5) and scanning control unit (23 of fig.5) processed and sampled the data

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according to the threshold values and calculated the frequency interference level (see fig.4,5).

But Weiler does not disclose explicitly that received signal converted into the digital data. However, Randall et al teaches radar data acquisition system (same field of endeavor) wherein acquisition system comprising computer system, digital intermediate frequency processor, DSP, antenna , separate transmitter/receiver module (115,120 of fig.2) and electronics circuit module (245 of fig.4) includes display and keyboard (i.e. measuring device) wherein electronics circuit module (245) further comprising digital IF processor (304 of fig.3) for processing input IF signal and assigning symbol to state I-Q signal components ( see fig, 3,4 and col.5 lines 14-50).

Re claim 11, as discussed above with respect to claim 1, Weiler discloses all the limitation except the input data is manually inputted by any one of operating keys, a rotary knob, or arrow keys.

Randall et al further teaches electronics circuit module (245) further comprising DSP(328) wherein user can customize/debug high speed signal processing tasks by inputting data via keyboard key pad (see fig.2) (i.e. user can input data manually to the measuring device) based on radar data installation demands (see fig.2,( step 540),6 and col.5 lines 61-67,col.6 lines 38-54, col.11 lines 14-23).



Re claim 12, Weiler discloses a high-frequency interference signals measuring system (see abstract) for measuring a radiation frequency of portable computer (15 of fig.4) i.e. device under test, comprising:

a central monitoring unit (5 of fig.5) (i.e. measuring-device unit) receiving input data from a user computer and high-frequency module (3A to 3N) (i.e. plurality of receiver unit) and each receiver unit (i.e. each high-frequency module) is placed separately from the central monitoring unit (5) (i.e. measuring-device unit) and each high-frequency receiver module comprises bus transmitting unit (19 of fig.5) which is connected to the monitoring unit (5) via digital data bus (4 of fig.5) (i.e. digital interface) for transmitting data from the central monitoring unit (5) to the receiver (3A...3N) (i.e. at least one of the high frequency module) (see abstract, fig. 4-5,col.3 lines 5-9 , col.3 lines 56-67 and col.4 lines10-32); and

wherein a message comprising a high-frequency signal originating from the device under test (15 of fig.4) is transmitted to the high-frequency module (3A to 3N of fig.4), the high-frequency signal being processed by the high-frequency module to form a first bit-stream for transmission via the digital data bus interface (4 of fig.4) to the measuring-device unit (5 of fig.4) and processed or scanned input data (24 of fig.5) in the central monitoring unit (5) (i.e. measuring-device unit) and form a bit stream (digital form) for transmission via data bus (4)(see fig.4,5 and col. col.4 lines 53-67) to the high frequency module (3) for subsequent forwarding to the device under test (15 of fig.4) (see fig.4,5 and col.4 lines 53-67,col.5 lines 10-32,col.6 lines 23-33).